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NETWORK META-ANALYSIS OF RELATIVE EFFICACY AND SAFETY OF EDOXABAN VERSUS OTHER NOVEL ORAL ANTICOAGULANTS (NOACS) AMONG ATRIAL FIBRILLATION PATIENTS WITH CHADS2 SCORE ≥ 2

Poster Contributions
Poster Hall B1
Saturday, March 14, 2015, 3:45 p.m.-4:30 p.m.

Session Title: Anticoagulation for Atrial Fibrillation: How Are We Doing?
Abstract Category: 4. Arrhythmias and Clinical EP: AF/SVT
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Background: Notable differences in patient characteristics exist among the phase 3 trials studying non-VKA oral anticoagulants (NOACs) for stroke prevention in atrial fibrillation. This study compared the efficacy and safety of edoxaban versus other NOACs after adjustment of baseline patient characteristics for key prognostic factors.

Methods: A network meta-analysis using data from ENGAGE-AF TIMI-48, RELY, ROCKET-AF and ARISTOTLE with warfarin as a common comparator was performed. To adjust for differences in CHADS2 score and length of follow-up across the trials, annualized event rates among patients with CHADS2 score ≥2 were analyzed using mixed Poisson regression.

Results: While efficacy for the composite endpoint of stroke and systemic embolism (SEE) was similar for high dose edoxaban QD compared to other NOAC regimens, high dose edoxaban significantly reduced major bleeding risk by 24%, 28%, and 17% compared to rivaroxaban QD, and dabigatran 150 mg BID, and dabigatran 110 mg BID, respectively. Major bleeding rates were similar between high dose edoxaban QD and apixaban BID. Low dose edoxaban QD had similar efficacy and reduced bleeding compared to rivaroxaban and dabigatran 110 mg, and had higher rates of stroke/SEE and reduced bleeding rates compared to apixaban and dabigatran 150 mg.

Conclusion: In this adjusted indirect comparison, high-dose edoxaban offered similar efficacy to the other NOAC regimens but with a significant major bleeding benefit over rivaroxaban and dabigatran.

	Table: NOACs' Pivotal Trial Characteristics and Network Meta-Analysis Results			
	RELY	ROCKET-AF	ARISTOTLE	ENGAGE-AF TIMI-48
Total patients in phase 3 trial	18,113	14,264	18,201	21,105
Years of follow-up (median)	2.0	1.9	1.8	2.8
Patients with CHADS2 score ≥ 2	68%	100%	66%	100%
Patients with previous stroke or transient ischemic attack	20%	55%	19%	28%
Patients with heart failure	32%	62%	35%	57%
	Risk Ratio (95% CI) of once-daily edoxaban versus other NOAC among patients with CHADS2≥2			
	Dabigatran 150 mg twice daily (BID)	Dabigatran 110 mg twice daily (BID)	Rivaroxaban (20mg/15mg) once daily (QD)	Apixaban (5mg/2.5mg) twice daily (BID)
Composite of stroke and systemic embolism (SEE)				
High dose edoxaban regimen (60 mg/30mg) QD	1.26 (0.97, 1.64)	0.95 (0.74, 1.22)	0.90 (0.70, 1.16)	1.08 (0.86, 1.37)
Low dose edoxaban regimen (30mg/15mg) QD	1.64 (1.26, 2.13)	1.24 (0.97, 1.58)	1.17 (0.92, 1.50)	1.41 (1.12, 1.77)
Major bleeding				
High dose edoxaban regimen (60mg/30mg) QD	0.72 (0.61, 0.84)	0.83 (0.71, 0.98)	0.76 (0.66, 0.89)	1.08 (0.91, 1.28)
Low dose edoxaban regimen (30mg/15mg) QD	0.42 (0.35, 0.50)	0.49 (0.41, 0.59)	0.45 (0.38, 0.53)	0.63(0.52, 0.76)